

TECHNIQUES FOR TRANSMISSION OF MESSAGE FRAGMENTS BETWEEN OBJECT REQUEST BROKERS

ABSTRACT OF THE DISCLOSURE

5 Techniques for transmission of message fragments between Object Request Brokers
operating in distributed object oriented environments. The techniques provide an elegant
mechanism for fragmentation of messages into sub-messages. In one embodiment, a
fragment-offset is provided as a means for determining the location of data bytes in sub-
messages with respect to the original message that has been fragmented. During the
10 construction and transmission of sub-messages, the fragment-offset can be updated to indicate
the current offset with respect to the original message. Accordingly, in contrast to
conventional techniques, a significant amount of computations or bookkeeping to track of
several other variables (e.g., number of fragments constructed, total number of bytes
constructed, etc.) are not required. As will appreciated, the headers of the sub-messages need
15 not be of the same size. Similarly, the data portions of the sub-messages can vary in size. As
a result, the techniques provides an elegant means to determine the location of bytes in sub-
messages with respect to the original message that has been fragmented, without requiring the
size of the data fragments and header fragments to be constant.